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**METROPOLITAN TORONTO  
DEPARTMENT OF ROADS**

**BIENNIAL REPORT**

**1965-66**

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GEORGE O. GRANT  
B.Sc., M.E., P. ENG.  
COMMISSIONER OF ROADS



## DEPARTMENT OF ROADS

City Hall  
14th Floor, East Tower  
100 Queen Street West  
Toronto 1. August 1, 1967.

William R. Allen, Esq., Q.C., Chairman,  
and Members of the Council of  
The Municipality of Metropolitan Toronto.

Ladies and Gentlemen:

I forward herewith, for your information, Biennial Report of the Department of Roads of The Municipality of Metropolitan Toronto. It covers the operations of the Department for the years 1965 and 1966.

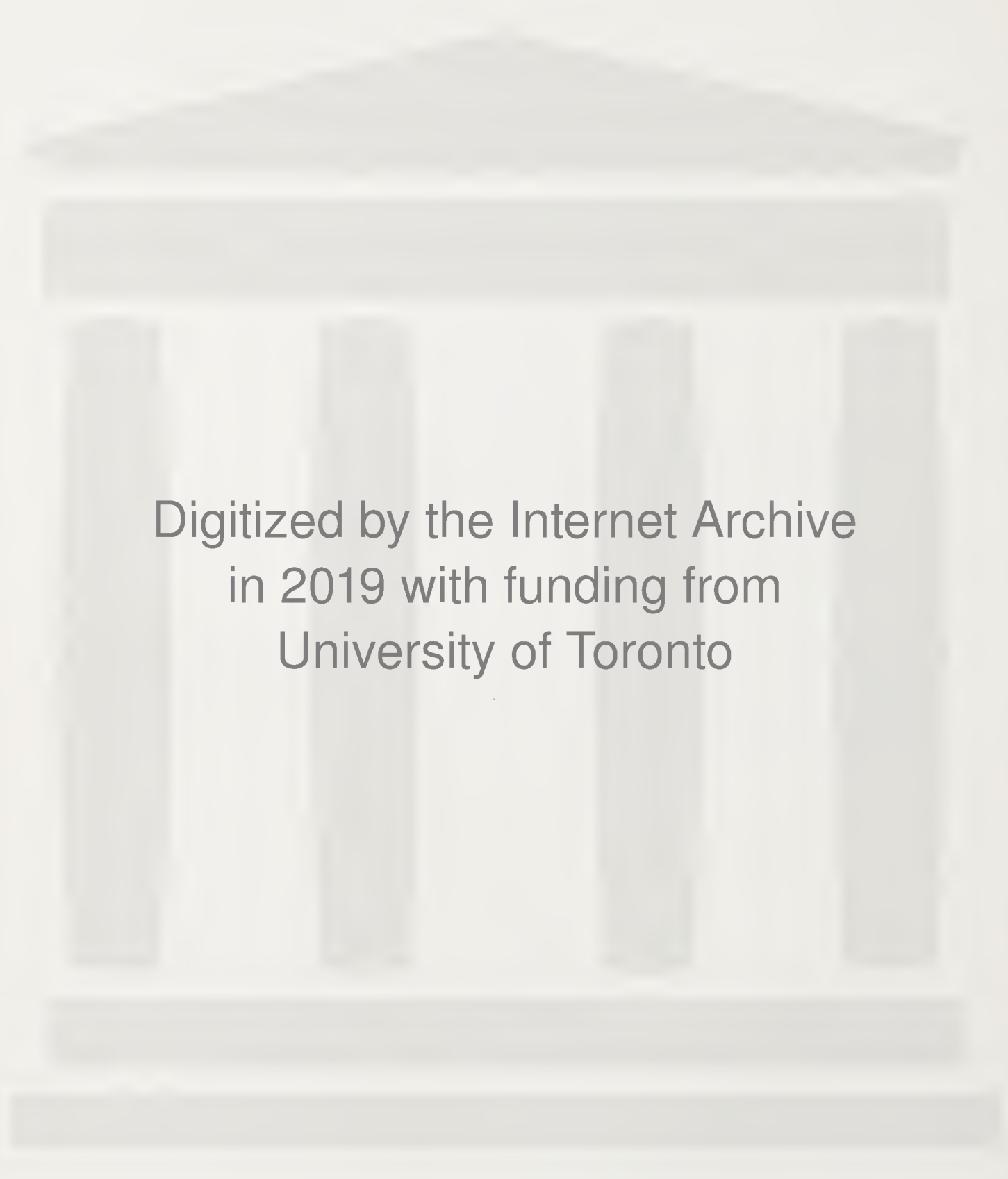
Yours very truly,

A handwritten signature in cursive script, reading "G. O. Grant".

Commissioner of Roads.

ET  
Enc.





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Committees of Council - The two Committees of Council pertinent to the Department of Roads are the Executive Committee and the Transportation Committee. Their membership for the two years embraced by this report was as follows:

1965

1966

Executive Committee

W. R. Allen, Q.C.  
(Chairman)  
W. Dennison  
P. G. Givens, Q.C.  
J. P. MacBeth, Q.C.  
J. Mould  
H. Orliffe, Q.C.  
E. J. Pivnick, Q.C.

W. R. Allen, Q.C.  
(Chairman)  
A. M. Campbell  
W. Dennison  
P. G. Givens, Q.C.  
J. MacBeth, Q.C.  
J. Mould  
H. Orliffe, Q.C.

Transportation Committee

A. M. Campbell,  
(Chairman)  
F. J. Beavis  
P. G. Givens, Q.C.  
J. P. MacBeth, Q.C.  
P. B. Pickett  
J. D. Service

F. J. Beavis  
(Chairman)  
A. M. Campbell  
P. G. Givens, Q.C.  
P. B. Pickett  
E. J. Pivnick, Q.C.  
J. D. Service

The Metropolitan Chairman is ex-officio a member of the Transportation Committee.

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Cover: Lawrence Avenue West Subways

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- FOREWORD -

As 1966 ended, the statistical record of the Metropolitan Department of Roads indicated completion of the following projects in the thirteen-year period since its organization on January 1, 1954:-

Structures:

Railway Grade Separations - New .....	30	
- do. - - Reconstructed ..	4	
Other Bridges .....	<u>104</u>	138
New Roads .....		36.24 miles
Existing Roads Reconstructed .....		24.51 "
Pavement Widenings .....		74.21 "
Resurfacing of Pavements .....		145.33 "
Intersectional Improvements .....		222
Bridges Repaired (major works) .....		13
Bridges Widened .....		3

Capital costs during this period were as follows:-

\$

1954	-	4,120,164
1955	-	10,231,814
1956	-	15,567,954
1957	-	15,888,326
1958	-	13,491,954
1959	-	13,858,094
1960	-	27,216,097
1961	-	23,950,330
1962	-	29,263,276
1963	-	39,797,854
1964	-	31,564,525
1965	-	32,145,288
1966	-	33,710,888

Vehicle registration in the Metropolitan Toronto Area increased by approximately 87% from 1954 to 1966 compared to a population growth of 60% during the same period. As a result, there are now 2.8 persons per vehicle in the area, which places Metropolitan Toronto in the position of having one of the highest ratios of vehicle ownership on the North American continent.

- CAPITAL WORKS UNDERTAKEN -

Frederick G. - Without ceremony, the last barricade was removed from  
Gardiner and the final one-mile section of the eight-mile Frederick G.  
Scarborough Gardiner Expressway on the afternoon of July 15, 1966,  
Expressways and the first controlled-access urban freeway to be  
opened to traffic in Canada was completed.

The final section carries six lanes of traffic on elevated structure from the Don River to grade at Leslie Street.

Since the original section was opened in 1958, records compiled by the Police and Traffic Engineering Departments reflected a number of head-on accidents caused by vehicles crossing the median strip. In view of this, a median barrier for the full length of the Expressway was completed in 1966.

The authorized expenditure on this project is \$103,500,000 and with the finalization of accounts in sight the following is an indication of the cost ratio:

Actual Construction .....	60%
Relocation of Utilities .....	4
Property - Private .....	21
Public .....	10
Engineering and Supervision .....	4
General - Borings, Steel Inspection, Tests, Traffic Control, etc. ....	1

In all, some 42 contracts were let on the work, and their total cost was but 4% over the tendered amounts.

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A functional report on the Scarborough Expressway, which is proposed as the easterly extension of the Frederick G. Gardiner Expressway, is now under consideration by the Metropolitan Administration.

It covers the section from Leslie Street to Birchmount Road, on which it is anticipated construction will commence in 1969. Any property offered for sale along the line of this proposed section is being acquired.







Don Valley Parkway and Extension - During 1965, construction of the final section of the Don Valley Parkway between Lawrence Avenue and the Macdonald-Cartier Freeway was commenced. Co-incidentally with this, the Department of Highways, Ontario, was undertaking the widening of the Macdonald-Cartier Freeway in the area of the Parkway. The construction of the necessary Interchange between the two freeways therefore became a joint responsibility.

Since the D.H.O. was bearing the major share of the direct cost of the Interchange --- approximately 65%, plus the 50% subsidy on the Metropolitan Toronto share --- construction of the Interchange was included in their Macdonald-Cartier Freeway Widening contract. The estimated total cost of the Interchange was \$7,900,000.

The original estimate of Metropolitan Toronto's gross share of the Freeway Interchange included in the functional report for the Parkway approved in 1956 was \$630,000, and the revised design increased this to \$2,725,000.

The first plan of the Interchange provided for a simple cloverleaf necessitating one structure over the Freeway, but, because of its redevelopment, became an interchange encompassing 11 structures, and considerably more property was required than had been originally contemplated.

Certain other large facilities have been added to the design of the Parkway, which included overpasses, underpasses and additional roadwork, adding a further \$2,400,000 to the cost of the project.

The section northerly from Lawrence Avenue and the Macdonald-Cartier Interchange were opened on November 19, 1966.

An agreement with the Department of Highways provides that the Metropolitan Corporation is to proceed with construction of the Parkway Extension from the Macdonald-Cartier Freeway to Steele's Avenue, so that it will be completed at the same time as proposed Highway 404 from Steele's Avenue to Highway No. 7. No specific date has been set for this, but it is anticipated that it will be about 1972.

When completed, from the Frederick G. Gardiner Expressway to Steele's Avenue, the Don Valley Parkway will be 12.61 miles in length.

It is expected that 10.33 miles of this, to and including an interchange with Sheppard Avenue, will be in operation by April, 1967.







Problems with slippages of side slopes continued along previously-opened sections of the Parkway and slope stabilization contracts were let to correct conditions where necessary. A median rail was also constructed for the length of the Parkway.

Bayview Avenue, an associated project of the Parkway, was further extended from Queen Street to Front Street during 1965.

Spadina - Completion of the Interchange of the Spadina Expressway with the Macdonald-Cartier Freeway on December 15, 1966, provided a \$13,000,000 complex of 27 bridges and ramps, adding up to ten miles of two-lane road and occupying 150 acres of land.

Its design and construction was a combined endeavor of the Department of Highways, Ontario, and Metropolitan Toronto, with the Yorkdale Shopping Centre, which in part it serves, contributing to the cost.

Completed simultaneously with the Interchange were the sections of the Expressway from Lawrence Avenue to Clanton Park Road at Downsview.

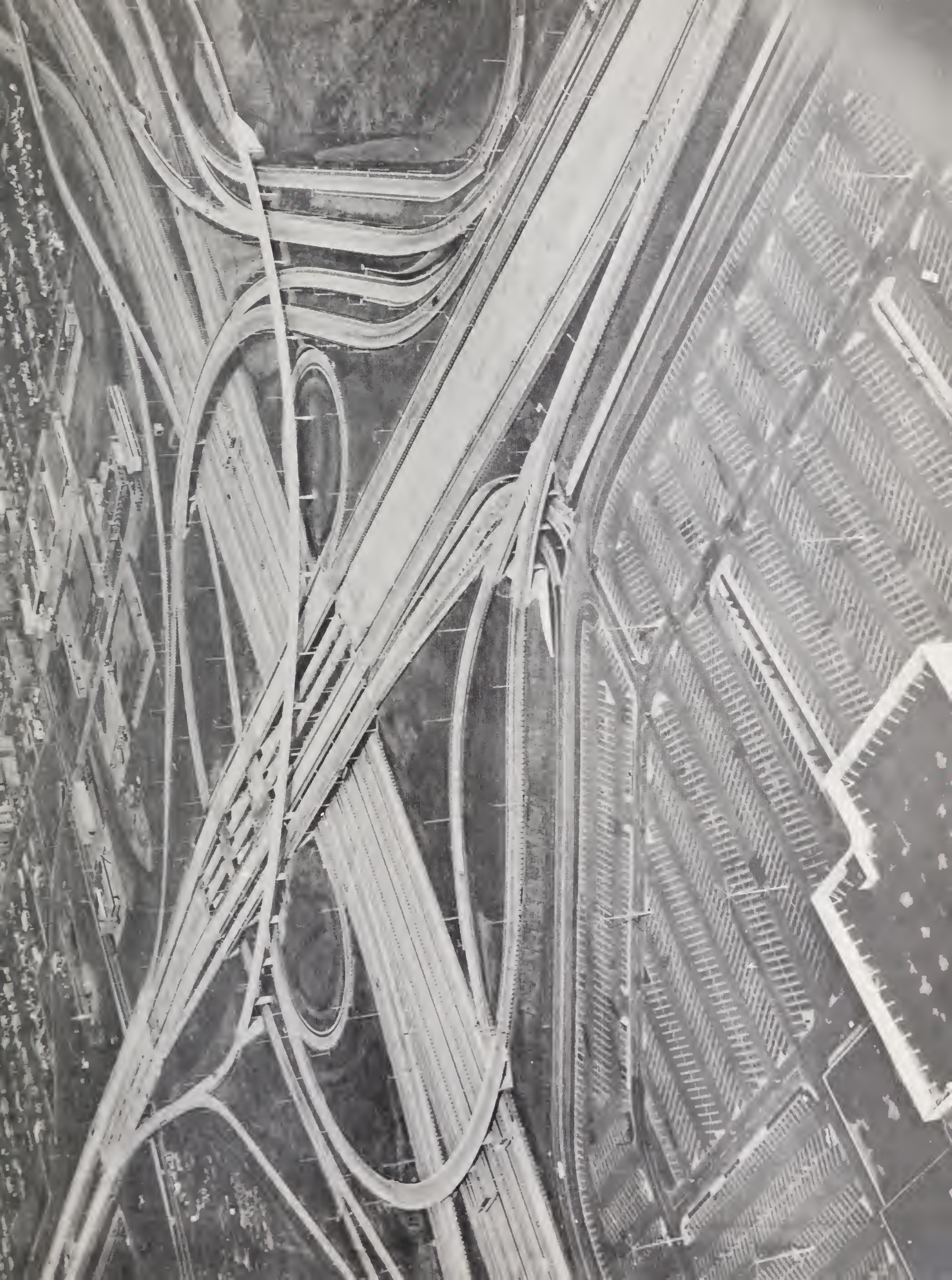
Construction is progressing on a major trunk storm sewer which will drain the south portion of the Expressway to the Don River. Three contracts have been let on this south trunk sewer totalling over \$10,000,000.

Additional capacity has been provided in the sewer which will facilitate the separation of the storm and sanitary sewer system in adjacent areas of the City of Toronto and the Borough of York, thereby permitting high-rise development of these areas. The Metropolitan Department of Works is contributing to the cost of this trunk sewer to the extent of the additional cost of providing capacity beyond that required for Expressway purposes.

This six-lane depressed project is soon to bulldoze its way south to the City of Toronto boundary from where it will plunge its way into a diamond-shaped interchange at Eglinton Avenue. A 50-foot gravel-based strip is being left in the middle for a rapid transit right-of-way. Completion of this section is scheduled for 1970.

Construction south of Eglinton Avenue will involve an 1800-foot tunnel under St. Michael's College, through the Nordheimer Ravine, another 1500-foot tunnel to the east of Casa Loma, and return to the depressed open cut-route south of Davenport Road. The Expressway reaches ground level on Spadina Avenue south of Bloor Street and should end near Harbord Street by 1974.







Don Mills        -        Work completed on this thoroughfare included replace-  
Road                        ment of the timber two-lane bridge over the C.N.R. north  
                              of Lawrence Avenue to York Mills Road, and the Exten-  
sion of Don Mills Road from York Mills Road to Sheppard Avenue, in 1965.  
In 1966, a subway was constructed under the C.P.R. north of Eglinton  
Avenue and the sections from south of Overlea Boulevard to Eglinton Avenue  
and Barber Greene Road to Lawrence Avenue were widened.

The C.P.R. subway project, like so many of its type,  
required extensive relocation of utilities, all without any interruption of  
services.

These included relocation of a 24-inch Metropolitan  
watermain, two local watermain, a separated storm and sanitary sewer  
system, a telephone trunk line, telegraph and signal lines, Ontario and  
North York hydro cable, a major gas main, a burglar alarm system, and  
feeder lines to computers at IBM and other plants. Add to this the major  
item of shifting back and forth a lengthy section of what is probably the  
busiest section of railway track in the country while keeping some 70 trains  
a day on schedule.

Statistics indicate that it was all a successful operation,  
as some 18,000 motor vehicles moved daily through the site without a  
serious mishap.

A new "first" in Canada was the use of a waterproofing  
technique using butyl rubber sheets under the C.P.R. roadbed to protect  
the structure.

The subway was constructed with continuous reinforced  
box girders, a method which makes it possible to inset pier columns  
directly into the superstructure and thus provide clean, unbroken lines  
between the structure and its supports. Ornamental stone-work facings  
complement the structure itself and neighboring buildings.

The reconstructed pavement provides for four lanes of  
traffic and left-turn storage lanes except in the section between Barber  
Greene Road and Eglinton Avenue where the road is six lanes wide with  
left-turn lanes. Included in the construction was a centre median for  
approximately three miles in length between Chipping Road and Overlea  
Boulevard. This median for the most part is 15' in width and is broken to  
provide left-turning movements to intersecting streets, to the Province of  
Ontario Centennial Centre of Science and Technology and the Don Mills  
Shopping Centre.





Don Mills Road Grade Separations:

Above - Replacement of two-lane timber bridge over C.N.R., north of Lawrence Avenue.

Below - Elimination of grade crossing at C.P.R., north of Eglinton Avenue.





These projects complete the reconstruction of Don Mills Road from the Don Valley Parkway to York Mills Road. This, along with the recently completed Don Mills Road Extension, provides a multi-lane permanent pavement facility south from the Finch Avenue area to the Don Valley Parkway.

Eglinton - Another level crossing which had been the scene of several fatal traffic accidents was eliminated with the opening on October 27, 1966, of the three-bridge grade separation over the C.N.R. and C.P.R. on Eglinton Avenue West, at Weston.

A design feature of the structure was a 780-foot cantilevered retaining wall, built from three basic components --- precast wall panels, precast post-tensioned concrete pylons and cast-in-place footings to which the pylons were anchored. Earth pressures hold the panels tightly against the back of the pylons.

Major advantages over the standard cast-in-place walls for similar applications were the rapid installation, being pretested to full load in place before backfilling, improved appearance and durability, and simplified Winter construction. It resulted in an attractive yet economical concept in retaining walls, thereby eliminating large drab expanses of grey concrete as seen in conventional poured in-place walls. There was also the time-saving factor.

The retaining wall was part of a \$2,600,000 project, which included the grade separations of the Railways, a bridge over Black Creek and widening of the roadway from Trethewey Drive to Weston Road, also completed in 1966.

It all formed part of a general development of Eglinton Avenue West which will extend from Caledonia Road to Royal York Road.

Construction of the earth embankment across the Eglinton - Jane Flats is scheduled to commence in 1967, and construction of the bridge over the Humber River is slated for a 1968 start.



Bridge over Black Creek, Eglinton Avenue West.





Elimination of double level crossing, Eglinton Avenue West, at Weston.



A unique operation in the widening of Eglinton Avenue West was the relocation of a one-storey Bank building, estimated to weigh 700 tons, and moving it a distance of 93 feet. To accomplish this, holes were punched in the concrete basement walls at 4-foot centres and a grid of steel beams inserted. The building was jacked two feet and placed on seven runs of steel rollers.

The new site was excavated, footings placed, and the building winched to its new location over a two-month period without interruption of business.

Lawrence Avenue East - The high-level Willows Bridge over the Highland Creek ravine on Lawrence Avenue East was completed at a cost of \$1,600,000 and opened to traffic on June 11, 1966. This is the largest bridge project undertaken by Metropolitan Toronto and contains several unique features. It is 787 feet in length.

It consists of five 158-foot spans which are carried by fifty 140-ton precast post-tensioned concrete beams, each of which are 8'3" in height.

The unusually large-sized beams required the creation of a casting yard at the site with six casting beds. The specified 28-day compression strength of the concrete was 6,000 p.s.i. The production of such high-strength concrete is a relatively new development and necessitated considerable trials of design mixes. Another requirement was 5,000 p.s.i. within 48 hours of casting to permit first-stage stressing and moving of the beams from the casting beds. To meet this requirement the mix yielded 28-day compressive strengths of as high as 10,000 p.s.i.

The most spectacular phase of construction was erection of the beams. Site conditions and heavy weight of the beams made their erection with even the largest mobile cranes impractical. A self-launching truss was designed and fabricated by the Contractor to transport the beams from the casting yard into place on the piers. The truss was the largest and most sophisticated ever employed in this application.

The reconstruction of Lawrence Avenue to accommodate four lanes of traffic between Markham Road and Kingston Road was undertaken simultaneously with construction of the Willows Bridge and following an expenditure of \$600,000 was opened co-incidentally with it.

With this opening the reconstruction of Lawrence Avenue from Scarlett Road to Kingston Road, a distance of 18 miles, was completed, with the exception of the bridging of the west branch of the Don River at Bayview Avenue.





Above: "Willows Bridge" over Highland Creek, Lawrence Avenue East.

Below: Placing of beams by specially-constructed truss.





Eglinton  
Avenue East

- The Extension of Eglinton Avenue East, which was one of the major projects included in the original Capital Roads Programme, was opened as a four-lane highway in 1957.

In 1966, it was widened to six lanes from Don Mills Road to Jonesville Crescent and a median constructed.

Co-incident with this widening, a grade-separated access was constructed onto Eglinton Avenue from the IBM property at the north-west corner of Don Mills Road.

IBM participated in the cost of the project, paying for the cost of a bridge to provide for four lanes of Eglinton Avenue traffic and footings for an additional two lanes. The Company also paid for the access roads leading to the Eglinton Avenue right-of-way as well as for the roadway under the bridge. Metropolitan Toronto's share was the cost of acceleration and deceleration lanes and ramps located on the Eglinton Avenue right-of-way and the temporary by-pass required during construction.

In the maintenance phase, the Company will be responsible for the ramps and the roadway leading into its property and the Corporation the structure.



IBM grade-separated access from Eglinton Avenue East, facing site of proposed Ontario Centennial Centre of Science and Technology.

Bayview Avenue - The \$5,800,000 widening and improvement of Bayview Avenue from Eglinton Avenue to Steeles Avenue was completed in 1966. This included the installation of a concrete median barrier throughout the Interchange with Lawrence Avenue, and across the high-level bridge over the Don Valley.

A service employed on the Bayview Avenue work was the nuclear density testing of road materials. This involved on-site compaction tests of soils and granular materials through the use of portable laboratory equipment.

Finch Avenue - Improvement of Finch Avenue, between Bathurst and Dufferin Streets, was carried out during 1965. The work consisted of widening the right-of-way, grading, graveling the roadway and applying a light asphalt surface two lanes wide. It also included widening the existing 30-foot wide bridge over the west branch of the Don River to four lanes, plus sidewalks.

The next stage in the improvement of Finch Avenue will comprise the widening of the pavement to four lanes between Yonge and Dufferin Streets, which is scheduled for commencement in 1969. A grade separation at the C.N.R., east of Keele Street, will be constructed co-incidentally.

Islington Avenue - Prior to the assumption of Islington Avenue  
Grade Separation from The Queensway to Albion Road by the Metropolitan Corporation in 1962, the Township of Etobicoke had obtained approval of the Ontario Municipal Board for construction of a grade separation on Islington Avenue under the tracks of the Canadian Pacific Railway Company in the vicinity of Cordova Avenue.

This project was completed by the Township and the net costs were assumed by the Corporation.

Jane Street - A further improvement to Jane Street was undertaken in 1965 with the reconstruction and widening of the section from Foxwell Street to Lambton Avenue to four lanes.

This work included extension of the concrete arch culvert over Black Creek.

Considerable difficulty was encountered in the latter area due to poor soil conditions. The original arch was sitting on 35-foot jack pine piles, and a similar type was specified for the culvert extensions. When the driving of piles commenced it was found essential to penetrate to a depth of 50 feet to obtain satisfactory resistance, and it



was necessary to change the type to steel tube piling, so that additional sections could be welded on as required.

Keele Street - Principally because of the opening of the Bloor-Danforth Subway line, Keele Street was widened to 48 feet in 1965 between Bloor Street and Annette Street to accommodate the trolley bus line connecting Annette Street with the Keele Street subway station.

The work required extensive alterations to properties. Steps leading from the sidewalk to each house were rebuilt. Concrete retaining walls were constructed to retain adjacent front lawns, and slopes faced with mortared flagstone paving where walls were not required.

Kennedy Road, Sheppard and Warden Avenues - Major intersectional improvements were carried out in 1965 on Kennedy Road and Warden Avenue at their intersections with Sheppard Avenue. Forming part of the work was construction of reinforced concrete bridges over Highland Creek on Sheppard Avenue east of Kennedy Road, and on Kennedy Road north of Sheppard Avenue, both of which were completed in 1966.

These structures were undertaken in collaboration with the Channel Improvement Program of the Metropolitan Department of Works.

Leslie Street - The first contracts for the improvement of Leslie Street were awarded in 1965 and 1966. The elimination of the jog at Sheppard Avenue is being done by creating a new six-lane road running south from Sheppard Avenue opposite Leslie Street to the north. This new road will meet the existing alignment of Leslie Street south of Stubbs Drive.

Included in this section is the elimination of the at-grade crossing of the C.N.R. south of the Macdonald-Cartier Freeway and an interchange to provide access to the new North York General Hospital and the York Regional School of Nursing.

The structure for the C.N.R. grade separation has been completed by the Railway, and construction of the approaches to the Subway are included in the Department of Highways' contract for the Interchange of the Macdonald-Cartier Freeway and Leslie Street, to be completed in 1967.

Because of adverse soil conditions in this area, the roadway cut required to be widened to provide a 60-foot wide terrace half-way up the side slope on each side, and the three spans originally designed for the railway structure had to be increased to five.



Markham Road

- The sections of the original two-lane roadway between Kingston Road and Eglinton Avenue, and between Lawrence Avenue and Ellesmere Road, were widened in 1965.

Reconstruction of the section between Ellesmere Road and the Macdonald-Cartier Freeway, which included the construction of a new bridge over Highland Creek, was carried out in 1966.

This now completes the widening of Markham Road, from Kingston Road to Sheppard Avenue, to a four-lane roadway with six-lane bridges.





- MAINTENANCE -

Since 1954, the Department of Public Works of the City of Toronto has undertaken, on a work-order basis, all routine pavement maintenance of roads under the jurisdiction of Metropolitan Toronto lying within the City, with the exception of the Expressway System. This involved some 92 miles of pavement, or approximately 380 lane miles, and an expenditure of about \$250,000 annually.

For the past ten years the Department of Roads has been supervising all resurfacing and construction work performed by contract.

This division of maintenance resulted in a repeated cross-referring of complaints and the two Departments concerned having to consult with each other to determine to what extent repairs should be effected.

Agreement was reached that, effective January 1, 1967, the Department of Roads would assume the routine maintenance of all Metropolitan roads within the boundaries of the City.

Similarly, Winter Maintenance of Metropolitan roads within the City (with the exception of expressways) has been undertaken by the City's Streets Department on a work-order basis since 1954. This is to be continued for the duration of the 1966-67 Winter Season, following which the operation will be completely assumed by Metropolitan forces.

This realignment will require the establishment of two additional district yards and an increased staff of 50 employees, for which approval has been given.

A recently-adopted policy in respect to snow removal provides that the Department of Roads will remove all snow from the pavement back to the curb line and, in location where an Area Municipality removes snow from behind the curb, forces of the Department of Roads will pick up the snow when it is pushed onto the road pavement immediately ahead of its snow removal operations. On streets where the curb line is not clearly defined, and there is a parking area serviced by parking meters between the pavement and the sidewalk, the Department of Roads will remove snow back to the line of the parking meters.

The dumping of snow having become a problem because of the unavailability of sites, tests were made during the Winter of 1965-66 with snow melters.

Cost analysis indicated that when the haul distance is more than three miles it is more economical to use a mobile snow melter.

In the case of stationary installations, snow is loaded into trucks on the street and hauled to the snow melter, but this just reduces the need for dumping areas.

The mobile snow melter works on the principle of a loader dumping the snow directly into the melter, with both loader and melter proceeding down the street and the water being drained into the sewer system as the melting occurs.

As a consequence of the tests, acquisition of a 75-ton thermal mobile snow melter was authorized on a three-year rental-purchase arrangement in 1966.

The life span of the unit is assumed at 20 years, and the cost of melting one ton of snow after it leaves the loader has been reckoned at 64¢.

The Winter seasons of 1965 and 1966 were characterized by higher-than-average snowfalls, with a total of 68.7 inches falling in 1965 and 60.4 inches in 1966, as compared with a 30-year average of 55.5 inches.

Pertinent figures are -

	<u>1965</u>	<u>1966</u>
Tons of Sand .....	8,601	3,371
Tons of Salt .....	44,716	48,119
Hours of Snow Plowing .....	8,489	6,993

Maintenance Contracts  
called were -

Resurfacing .....	3	8
Intersectional Improvements ...	1	1
Bridge Repairs .....	1	-
Bridge Painting .....	5	1
Cut Repairs .....	1	2
Winter Maintenance .....	5	5

Permits were granted, as  
follows, in respect to  
applications, submitted by  
Area Municipalities and  
Public Utilities -

Installation of Services on Roads .....	1,637	1,681
Building Location Approaches ..	266	196
Entrance Permits .....	213	185

In 1965, extensive repairs were made to the Bloor Street Bridge crossing the Humber River.

Close to 100 tons of structural steel required replacement, the roadway deck was removed and relaid, and the piers refaced and their top sections reconstructed. New bridge railings were also installed.

The entire structure was repainted in 1966.

In 1966, Maintenance Yard No. 3 was moved from Eglinton Avenue, at Don Mills Road, to Bermondsey Road, south of Eglinton Avenue, to make the site available for the Ontario Centennial Centre of Science and Technology.

A modern maintenance building was constructed at a cost of \$130,000, on land acquired from the Borough of North York.

Its interior is designed to provide for low maintenance costs, and it is electrically-heated throughout.



New Maintenance Yard No. 3



- GENERAL -

Reorganization - Since 1956, the Department has operated with an establishment recommended by management consultants J. D. Woods and Gordon, Limited, following a study made by that Company in 1955. In recent years, as the volume and scope of the Department's operations increased, certain deficiencies in the Woods-Gordon establishment became apparent. By 1965, the growth of the work load required a reorganization of the Department's engineering staff to maintain an adequate standard of service.

The following table gives some indication of the increase in volume of work:

	<u>Metropolitan Toronto Population</u>	<u>Vehicle Registration</u>	<u>No. Miles Metropolitan Roads</u>	<u>Lane Mileage</u>	<u>Roads Dept. Expenditure</u>
1954	1,174,000	351,000	277	780	\$ 7,100,000
1966	1,881,700	655,000	388	1,370	\$41,300,000

In December 1965, Council approved a new organization proposed by the Commissioner of Roads for the Department. There were three main revisions in the new establishment:

1. A Planning Division was added to provide more advanced planning on future arterial roads and expressways and to work in co-operation with the Planning Board staff in providing information and comments on road facilities for all redevelopment in Metropolitan Toronto as now required by the Ontario Municipal Board.

2. A separate Surveying Division was formed under a Chief Surveyor to handle the greatly increased volume of property expropriated annually (approximately 700 parcels by 1965) and the increasing complexity of the work due to changes in The Expropriation Procedure Act, R.S.O.

3. The Department was divided into three Branches:

- I. Planning and Design  
(Planning, Design and Surveying)
- II. Operations  
(Construction and Maintenance)
- III. Administration  
(Accounting and Clerical)

The new establishment included some additional Engineers, and their classifications were changed from five grades to two.

Storm Sewers - Amending Legislation permits the Department of Highways, Ontario, to subsidize storm sewer construction on Metropolitan roads, in instances where the road benefits, to the extent of 27 inches maximum diameter. Where sewers exceed 27 inches in diameter, the Area Municipality pays the total additional cost on the basis of the ratio that the diameter in excess of 27 inches bears to the total diameter of the pipe.

The Corporation will assume only the costs approved for subsidy by the D.H.O.

Storm sewers authorized under this arrangement during 1965 and 1966 were as follows:-

Albion Road	- Golfdown Drive to Latonia Drive West branch of Humber to Irwin Road	Etobicoke Etobicoke
Avenue Road	- St. Clair Avenue to MacPherson Avenue	Toronto
Bloor Street	- High Park Avenue to Pacific Avenue Pacific Avenue to an outlet in High Park	Toronto Toronto
Broadview Avenue	- Cosburn Avenue to Fulton Avenue Danforth Avenue to north City limit	East York Toronto
Dufferin Street	- south from Bloor Street south from Finch Avenue	Toronto North York
Dundas Street	- Auckland Road to Acorn Avenue Boustead Avenue to Bloor Street Montrose Avenue to Grace Street Paulart Drive to Shaver Avenue	Etobicoke Toronto Toronto Etobicoke
Jane Street	- Ardagh Street to Annette Street	Toronto
Kingston Road	- Easterly from Markham Road	Scarborough
Kipling Avenue	- Dixon Road northerly	Etobicoke
Moore Avenue	- Welland Avenue to Mt. Pleasant Road	Toronto
Mt. Pleasant Road	- Roehampton Avenue to Eglinton Avenue	Toronto



O'Connor Drive	- Lankin Boulevard to Binswood Avenue	East York
St. Clair Avenue	- Yonge Street to Avoca Creek Symes Road to Maybank Avenue	Toronto Toronto
Sheppard Avenue	- westerly from Kennedy Road	Scarborough
Weston Road	- Oak Street to Fairglen Crescent	North York
Yonge Street	- Albertus and Sherwood Avenues to Creek	Toronto

When, in any current year, the cost of a storm sewer on a Metropolitan road is established as being eligible for subsidy, the debenturing allocation for that year of the Area Municipality concerned is reduced accordingly and such amount is added to the allotment for Metropolitan Roads purposes.

The estimated gross total of the foregoing installations eligible for the 50% subsidy is \$1,845,000.

Emergency Services On Expressways - Emergency patrol services have been provided on the Frederick G. Gardiner Expressway and the Don Valley Parkway with their being placed in operation. During rush hours, the Metropolitan Police Department has had special patrols and tow trucks stationed at strategic locations for emergency use and the Ontario Motor League has also provided patrol vehicles. During the remaining hours of the day the Metropolitan Police provide a patrol, generally one car, for emergency conditions.

In 1965, the Ontario Motor League proposed that they be permitted to install emergency call boxes on the two thoroughfares as part of their service to members and non-members alike, and it is operated and financed by them in the interest of safety and public service.

This system, which is the first of its kind in the World, incorporates 183 call boxes, installed on both sides of the road allowance, approximately 800 feet apart, and is directly connected to a "round-the-clock" emergency switchboard in the League's Toronto headquarters.

Since its installation, a monthly average of 550 calls have been received from motorists whose problems have ranged from out-of-gas, tire trouble, spilled loads to accidents.

Control Surveys

- Authority has been granted for the Department of Roads to assist the Association of Ontario Land Surveyors, through the South Central Group of Ontario Land Surveyors, in their Centennial Project to locate the true position of the original street corners in the Town of York, and then to initiate the new Provincial Co-Ordinate System by fixing the co-ordinate values of the corners.

The Town of York was originally surveyed and laid out under instructions from Governor Simcoe in 1793. The position of the street lines has been in dispute since 1796, and no plans showing measurements of the blocks are known to exist.

The proposed monuments will be fixing the true position of the corner stones of the City of Toronto, The Municipality of Metropolitan Toronto and the south central area of the Province of Ontario.

The Metropolitan Toronto Control Survey Projection System has been adopted by the Department of Mines and Technical Surveys, Ottawa, for the National Zone System and by the Department of Lands and Forests for the Ontario Co-Ordinate System.

The Ontario Co-Ordinate System will be used to control and relate surveying, mapping and engineering projects, and to index, on computers, the information gathered for planning, development, economics, statistics and resource studies. The relating of the Town of York survey to the Metropolitan Toronto Control Survey will be the first official use of the Provincial Co-Ordinate System.

The fixing of the monuments in the Town of York will be an historic event marking the setting of the corner stones and the initiating of a modern method of surveying.

The Association of Ontario Land Surveyors has requested the co-operation of the Department of Roads on this project.

Similarly, the Department's staff has been requested by the Surveyor General's office to assist the National Advisory Council on Cadastral (legal) Surveys to establish, as a Centennial Project, a co-ordinate survey monument in front of the Parliament Buildings at Toronto. It is planned that a monument be set in each Capital across Canada. These co-ordinated monuments will signify the establishment of control surveys across Canada and their importance in relating all cadastral surveys to a common fabric.



Metropolitan Toronto Public Utilities Co-ordinating Committee - With the introduction of the Borough system to Metropolitan Toronto on January 1, 1967, considerable study was given to the future of the Committee during the closing months of 1966. It was decided that, for the immediate future, very little change was necessary.

Changes to become effective were -

- 1) Membership assessments revised to suit the Borough system.
- 2) MTPUCC Sub-Committees reconstituted. The eight Sub-Committees were reduced to four, as follows:
  - a) Financial and Administration
  - b) Safety
  - c) Planning and Engineering
  - d) Operations.

It was further decided that the City and the five Boroughs would each have its own Public Utilities Co-ordinating Committee, with the MTPUCC acting as a central co-ordinating body.

During 1965 and 1966, the Committee dealt with many important topics, among them, underground accommodation for fuel oil distributing systems, safety of underground utilities, safety of public and personnel working on high-speed roads and expressways, and the subject of road cuts.

The Committee produced approximately 260 plans during 1965 and 1966. Improved methods of producing plans were considered, including photogrammetry, as well as the possibilities of using computer storage and retrieval systems.

In November, 1966, the Metropolitan Toronto Public Utilities Co-ordinating Committee lost its long-time Secretary in the person of Colonel F. S. McPherson, M.C., M.M., V.D., ED.

In the early 30's, as a representative of The Bell Telephone Company of Canada, he organized the City of Toronto PUCC and for many years served as its Secretary. Similarly, in 1955 he spear-headed the formation of the MTPUCC and served as its Secretary until his death. As a result of his vision, many similar Committees have been established across the Country.

Colonel McPherson was a distinguished Soldier and an Engineer of high principles with a great sense of duty and determination.

Financing - The following statement summarizes expenditures of the Department of Roads since its inception on January 1, 1954, through to December 31, 1966, and subsidies and contributions received:

	\$	\$
Gross Expenditures:		
Capital .....	290,806,564	
Current .....	68,543,040	
On account of Works which Area Municipalities had in progress on December 31, 1953, and which were assumed by the Metropolitan Corporation .....	<u>5,723,353</u>	365,072,957
Subsidies and Contributions:		
Province of Ontario - Statutory Grants ..	169,589,098	
Government of Canada - Railway Grade Crossing Elimination Fund .....	11,345,418	
Canadian National Railways .....	237,859	
Canadian Pacific Railway Company .....	877,715	
Area Municipalities, Toronto Transit Commission, Winter Works Incentive Program .....	<u>969,428</u>	<u>183,019,518</u>
Net Expenditure .....		<u><u>182,053,439</u></u>

Mileages - The following indicates a detail of mileages in the Metropolitan Road System as of December 31, 1966:

<u>Road Mileage</u>	<u>Number Of Lanes</u>	<u>Lane Mileage</u>
1.71	1	1.71
98.54	2	197.08
34.49	3	103.47
228.40	4	913.60
3.08	5	15.40
18.88	6	113.28
1.24	7	8.68
2.10	8	16.80
<u>388.44</u>		<u>1,370.02</u>



- WORKS UNDERTAKEN -

The schedule of works completed in 1965 and 1966 is as follows:

ELEVATED STRUCTURE

Mileage

1966

Frederick G. Gardiner Expressway - Don River to Leslie Street .... 1.00

STRUCTURES

1965 .

Don Mills Road .....	Bridge over C.N.R. north of Lawrence Avenue
Don Valley Parkway .....	Bridge over Three Valleys Drive
- do. - .....	Bridge over York Heights Gate

1966

Don Mills Road .....	Subway under C.P.R. north of Eglinton Avenue East
Don Valley Parkway .....	Bridge over York Mills Road
Eglinton Avenue East .....	Overpass west of I.B.M.
Eglinton Avenue West Extension .	Bridge over Black Creek
- do. - .	Subway under C.P.R. and C.N.R. east of Weston Road
Kennedy Road .....	Bridge over Highland Creek north of Sheppard Avenue
Lawrence Avenue East .....	Bridge over Highland Creek at "The Willows"
Leslie Street .....	Subway under C.N.R. north of Macdonald-Cartier Freeway
Markham Road .....	Bridge over Highland Creek
Sheppard Avenue .....	Bridge over Highland Creek east of Kennedy Road
Spadina Expressway .....	Bridge - Wilson Heights Boulevard over Spadina Expressway
- do. - .....	Bridge - Spadina Expressway over T.T.C. Station area
- do. - .....	Bridge - Spadina Expressway over T.T.C. connection to yard
- do. - .....	Temporary pedestrian bridge at Sunbeam Avenue

NEW ROADS

Mileage

1965

Don Mills Road Extension .....	York Mills Road to Sheppard Avenue .....	1.04
- do. - .....	Sheppard Avenue to south of Finch Avenue .....	1.08
Bayview Avenue Extension .....	Queen Street to Front Street ...	0.40

1966

Don Valley Parkway .....	Lawrence Avenue to Macdonald-Cartier Freeway .....	1.25
- do. - .....	York Mills Road, Laurentide Drive to Valley Woods Drive .....	0.30
Spadina Expressway .....	Yorkdale Road to Wilson Heights Boulevard including Interchange at Macdonald-Cartier Freeway .....	1.20

ROADS WIDENED

1965

Bayview Avenue .....	Sheppard Avenue to Finch Avenue	1.35
Don Mills Road .....	Lawrence Avenue to York Mills Road .....	1.40
Jane Street .....	Foxwell Avenue to Lambton Avenue .....	0.67
Lawrence Avenue East .....	Markham Road to Kingston Road ..	1.25
- do. - .....	East of "The Willows" Bridge to Susan Street .....	0.40
Markham Road .....	Kingston Road to Eglinton Avenue, and Lawrence Avenue East to Ellesmere Road .....	1.65

1966

Don Mills Road .....	1000 feet south of Overlea Boulevard to Eglinton Avenue, and Barber Greene Road to Lawrence Avenue .....	2.30
Eglinton Avenue West .....	Trethewey Drive to Weston Road .	1.06



Mileage

Keele Street .....	Bloor Street to Annette Street .	0.78
Kennedy Road .....	Danforth Road to Macdonald- Cartier Freeway, including 400 feet south of Eglinton Avenue .....	0.44
Wilson Heights Boulevard .....	Wilson Avenue to Clanton Park Road .....	0.70

EXISTING ROADS RECONSTRUCTED

1965

Dundas Street .....	Bloor Street to Sorauren Avenue	0.51
Finch Avenue .....	Bathurst Street to Dufferin Street .....	1.00
Wilson Avenue .....	Bathurst Street to Dufferin Street .....	1.50

1966

Adelaide Street .....	Bathurst Street to University Avenue .....	0.89
Donlands Avenue .....	O'Connor Drive to Leslie Bridge .....	0.42
Dundas Street .....	Bloor Street to Dupont Street ..	0.65
Eastern Avenue .....	Leslie Street to Queen Street ..	0.90
Pape Avenue .....	400 feet north of Gerrard Street to Danforth Avenue ...	0.65
Queen Street .....	Eastern Avenue to Kingston Road	0.95

BRIDGE WIDENING

1965

Finch Avenue .....	Over west branch of Don River
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MAJOR REPAIRS TO BRIDGE

1965

Bloor Street .....	Over Humber River
--------------------	-------------------

Mileage

RESURFACING OF PERMANENT PAVEMENTS

1965

Adelaide Street .....	Church Street to Jarvis Street .....	0.13
Dupont Street .....	Davenport Road to Christie Street .....	1.00
Oriole Parkway .....	Kilbarry Road to Oxton Avenue .....	0.11
Richmond Street .....	Church Street to Jarvis Street .....	0.13
Roxborough Street East .....	Yonge Street to Mt. Pleasant Road .....	0.42

1966

Bloor Street and Danforth Avenue .	Coxwell Avenue to Dundas Street .....	7.38
Kingston Road and Queen Street ...	Woodbine Avenue to Leslie Street .....	0.65

INTERSECTIONAL IMPROVEMENTS

1965

Dixon Road, at Royal York Road  
 Islington Avenue, at Dixon Road  
     - do. - at Rathburn Road  
 Kingston Road, at McCowan's Road  
 Kipling Avenue, at Albion Road  
     - do. - at Norseman Street  
     " at Rathburn Road  
     " at The Westway  
 St. Clair Avenue, at O'Connor Drive  
 Sheppard Avenue, at Pharmacy Avenue  
     - do. - at Warden Avenue  
     " at Willowdale Avenue  
 Vaughan Road, at Dufferin Street

1966

Bloor Street, at South Kingsway  
 Finch Avenue, at Senlac Road  
 Islington Avenue and The Kingsway  
 Kennedy Road, at Frimette Court



Intersectional Improvements (cont'd)

Kipling Avenue, at Princess Margaret Boulevard  
Lake Shore Boulevard, at Ellis Avenue  
Lawrence Avenue West, at Little Avenue  
Queen's Park Crescent, north of College Street  
St. Clair Avenue, at Arlington Avenue  
Royal York Road, south of Ashley Road  
Sheppard Avenue, at Senlac Road  
Sheppard Avenue, at Wilmington Avenue  
Wilson Avenue, at Walsh Avenue

- SUMMARY -

	<u>1965</u>	<u>1966</u>
<u>Works Completed</u>		
Elevated Structures .....	-	1.00 mile
Structures .....	3	14
New Roads .....	2.52 miles	2.75 miles
Roads Widened .....	6.72 miles	5.28 miles
Existing Roads Reconstructed .....	3.01 miles	4.46 miles
Bridge Widening .....	1	-
Major Repairs to Bridge .....	1	-
Resurfacing of Permanent Pavements .....	1.79 miles	8.03 miles
Intersectional Improvements .....	13	13

Works Under Construction, December 31, 1966

Structures .....	4
New Roads .....	1.38 miles
Road Widening and Reconstruction .....	1.52 miles

(Miss H. M. Meyrick)

Capital Projects

	<u>1965</u>	<u>1966</u>
	\$	\$
Annette Street, at Laws Street - Realignment .....	50,982 Cr.	2,089
Avenue Road - Pavement Widening and Subway; Bloor Street to St. Clair Avenue .....	14,007	1,172 Cr.
Bathurst Street - Pavement Widening; Sheppard Avenue to Steele's Avenue .....	18,918 Cr.	15,611
Bayview Avenue - Pavement Widening and Lawrence Avenue Interchange; Blythwood Road to Steele's Avenue .....	645,480	848,609
Bloor and Dundas Streets and Kipling Avenue (Six Points) Interchange ....	31,806 Cr.	150 Cr.
Danforth Road - Pavement Widening .....	575	-
Dixon Road - Widening; Highway 27 to Westerly Metropolitan Toronto Limit .....	74,526	13,501
Don Mills Road - Pavement Widening - Overlea Boulevard to York Mills Road, including Grade Separation, C.P.R., north of Eglinton Avenue .....	1,796,769	1,730,420
Extension - York Mills Road to Steele's Avenue, including Grade Separation, C.N.R., north of Lawrence Avenue .....	410,549	359,728
Don Valley Parkway and Related Works: Bayview Avenue Extension .....	697,213	12,161
Carlton Street Connection to Bayview Avenue .....	5,997 Cr.	1,704 Cr.
Don Valley Parkway .....	3,402,265	4,230,113
Duke-Duchess Interchange .....	509,423	1,919,097
Lawrence Avenue East Extension .....	-	1,939
Don Valley Parkway Extension .....	300,632	2,199,682
Dufferin Street - Pavement Widening; Eglinton Avenue to Wilson Avenue ..	5,110	1,804
Dundas Street West - Pavement Widening; Old Dundas Street to Renown Road .....	109,627	115,825
Dundas Street West, Royal York Road and C.P.R. Grade Separation .....	7,600 Cr.	85 Cr.
Eglinton Avenue West Extension .....	1,588,184	2,646,852



# Eglinton Avenue East Projects;

Extension from Laird Drive to Victoria Park Avenue ..... 255,599 51,787  
Widening from Victoria Park Avenue to Kingston Road ..... - 8,675  
Grade Separation - C.N.R., Bellamy Road ..... 2,400 3,820  
- do. - C.N.R., Kennedy Road ..... 1,989 Cr. 1,260 Cr.  
Widening from Leslie Street to Jonesville Crescent ..... 275,607 430,318  
Interchange at Wynford Drive ..... - 62,189

Frederick G. Gardiner Expressway ..... 6,871,012 2,874,561  
Scarborough Extension of Frederick G. Gardiner Expressway ..... 114,619 422,211

## Finch Avenue - Widening;

Bathurst Street to Dufferin Street ..... 582,928 67,267

## Islington Avenue;

Widening Projects ..... 142,685 48,849 Cr.  
Grade Separation, C.P.R., at Cordova Avenue ..... - 72,263

## Jane Street - Widening;

Dundas Street to Wilson Avenue ..... 524,877 86,129

## Keele Street - Pavement Widening;

Bloor Street to Annette Street ..... 719,192 297,135  
South Limit of Township of North York to Sheppard Avenue ..... 31,827 45,925  
Sheppard Avenue to Steele's Avenue ..... 21,010 140,446

## Kennedy Road and Danforth Road - Pavement Widening;

Danforth Road to Steele's Avenue; and  
Danforth Avenue to Kennedy Road ..... 335,921 338,956

## Kipling Avenue;

Pavement Widening - Macdonald-Cartier Freeway to Rexdale Boulevard ..  
Grade Separation, C.P.R., south of Bloor Street ..... - 101,642  
..... 13,502 95

## Lawrence Avenue East - Pavement Widening and Bridges;

East City limit to Bayview Avenue ..... 4,537 1,093  
Donway East to Blaine Drive ..... 33,498 16,960  
Victoria Park Avenue to Kingston Road ..... 1,766,927 340,241

Lawrence Avenue West - Pavement Widening; Yonge Street to Weston Road ..

231,543 282,669

Leslie Street - Widening and Bridges; C.N.R. to Sheppard Avenue .....

299,248 1,476,834

## Markham Road Projects;

Widening and Bridges, Kingston Road to Macdonald-Cartier Freeway ....  
Grade Separation at C.N.R., north of Eglinton Avenue ..... 605,419 660,326  
..... 1,405 Cr. -

Pottery Road - Paving from Broadview Avenue .....

43,197 89,101

Prince Edward and Rosedale Viaducts - Repair .....

1,200 Cr. -

	<u>1965</u> \$	<u>1966</u> \$
Queen Street West Extension .....	81,611	9,258
The Queensway - Pavement Widening; Islington Avenue to Kipling Avenue ..	-	17,417
Richview (Eglinton) Expressway .....	-	773
St. Clair Avenue East - Pavement Widening; Victoria Park Avenue to Kennedy Road .....	-	27,653
Sheppard Avenue East Projects; Grade Separation, C.P.R., Agincourt .....	21,669	132,194
Pavement Widening - Yonge Street to Kingston Road .....	17,892	550,249
Spadina Expressway .....	8,293,286	9,403,071
Victoria Park Avenue - Widening and Bridges; Kingston Road to O'Connor Drive .....	2,856	44,319
Eglinton Avenue to Sheppard Avenue .....	69,670	124,531
Warden Avenue - Pavement Widening; Kingston Road to Ellesmere Road .....	-	11,945
Ellesmere Road to Sheppard Avenue .....	6,570	12,378
Wilson Avenue - Widening; Avenue Road to Weston Road, including three Grade Separations .....	786,186	1,083,259
Woodbine Avenue - C.N.R. Subway .....	8,550	8,550 Cr.
York Mills Road - Pavement Widening; Don Mills Road to Woodbine Avenue .....	1,865	23,473
Storm Sewers - Various Metropolitan Roads .....	<u>544,444</u>	<u>363,159</u>
Capital Projects on Former King's Highways, of which the Department of Highways, Ontario, assumed 100% of Costs	32,144,610	33,709,983
The Queensway - Pavement Widening; Dillon Avenue to Highway 27 .....	84 Cr.	159 Cr.
Yonge Street - North City limit to Macdonald-Cartier Freeway .....	<u>762</u>	<u>1,064</u>
Total Capital Expenditures .....	<u>32,145,288</u>	<u>33,710,888</u>



## Current Expenditures

Administration .....	450,673	553,644
Roadway Maintenance .....	1,909,135	2,732,196
Bridge Maintenance .....	534,280	262,055
Winter Maintenance .....	2,838,969	2,555,544
Cleaning Roads .....	32,168	42,846
Road Signs .....	11,130	12,956
Intersectional Improvements and Special Items .....	781,998	560,903
Lighting, Major Roads .....	100,561	152,488
Passenger Loading Platforms .....	4,556	1,705
Machinery and Equipment - Purchases .....	29,492	29,465
- do. - Operation and Maintenance .....	75,910	77,694
Storm Sewer Maintenance .....	125,921	245,763
Sundry - Including Yard Operation, Insurance, and Employees' Fringe Benefits .....	212,671	356,305
Survey of Capital Works .....	<u>1,687</u>	<u>15,021</u>

Total Current Expenditures .....

7,109,151

## SUMMARY

Total Capital Expenditures .....	32,145,288	33,710,888
Total Current Expenditures .....	<u>7,109,151</u>	<u>7,598,585</u>
Total Expenditures, Gross .....	<u>39,254,439</u>	<u>41,309,473</u>

## Subsidies and Contributions

Province of Ontario - Statutory Grants .....	18,154,792	19,165,978
Government of Canada - Railway Grade Crossing Elimination Fund .....	1,976,377	1,366,520
Railways and Area Municipalities .....	<u>93,750</u>	<u>231,000</u>
Total Subsidies and Contributions .....	<u>20,224,919</u>	<u>20,763,498</u>
TOTAL EXPENDITURES, NET .....	<u>19,029,520</u>	<u>20,545,975</u>

W. C. Goldwin, C.A.

- SUMMARY OF CONTRACTS AWARDED -

Contract No.	Detail	Contractor	** Consultants	Project Engineers	Contract Amount \$
1-65	Don Mills Road - Reconstruction and Bridge, from Lawrence Avenue East to York Mills Road; Demolition of Timber Bridge over C.N.R. and Construction of Reinforced Concrete Structure with Prestressed Con- crete Deck Beams and Road Reconstruction, including Storm Sewers, Watermain, Granular Sub-Base, Concrete Sidewalks, Curbs and Gutters, Catch Basins, Concrete Base, Asphalt Paving, Bridge Lighting and Sodding.				1,002,821
Swansea Construction Co., Ltd. ....				T. H. Johnston	
2-65	Don Valley Parkway - Lawrence Avenue to south of Macdonald-Cartier Freeway; York Mills Road Relocation and Interchange Ramp at Don Mills Road; Twin Concrete Structures at Three Valleys Drive, York Mills Road and York Heights Gate West; Grading, Stone Base, Concrete Base, Asphalt Paving, Drainage, Watermain, Sign Structures and Signs, Lighting, Guide Rail, Fencing, Gabions and Sodding.				2,180,765 #
Miller Paving, Ltd.				A. F. Allman	
** Fenco-Harris .....				D. A. Patterson	
3-65	Eglinton Avenue West - Reconstruction of Bridge over Black Creek; Demolition of Existing Bridge, Driving of Foundation Piles, Construction of Reinforced Concrete Structure with Prestressed Concrete Deck Beams; Aluminum Hand- railing and Relocation of Sewers.				240,338
Redfern Construction Co., Ltd.				J. L. Shirley	
** James F. MacLaren, Ltd. ....				J. G. Flint	
4-65	Don Valley Parkway Extension - Sheppard Avenue Interchange; 900 feet to 2000 feet north of Sheppard Avenue and 2600 feet on Sheppard Avenue; Prestressed, Post-Tensioned Concrete Structure over Don Valley Parkway, Concrete Piles, Storm Sewer, Watermain Relocation, Retaining Wall, Granular and Concrete Base, Asphalt Paving, Sodding, Demolition of Buildings, Signing.				1,917,411 #
Miller Paving, Ltd.				A. F. Allman	
** Ewbank, Pillar and Associates, Ltd. ....				D. A. Patterson	



\$

5-65	Frederick G. Gardiner Expressway - Humber River to Elevated Structure; Supply and Erect Steel Beam Guide Rail, Aluminum Anti-Glare Panel and Asphaltic Concrete Paving on Median. Dufferin Materials and Construction, Ltd. ** Lakeshore Expressway Consultants .....	267,764
	K. J. Gilbert	
6-65	Various Roads (Outside City) - Permanent Asphalt Repairs of Utility Road Cuts. Johnson and Hogan Construction, Ltd. ....	68,008
	M. R. Browning	
7-65	Bayview Avenue Extension - Reconstruction on West Don Roadway from Queen Street to Front Street; Excavation and Grading, Catch Basins, Concrete Curbs and Gutters, Sidewalk, Granular Sub-Base, Concrete Base and Asphalt Paving. Kilmer, Van Nostrand Co., Ltd. ....	58,772
	A. F. Allman	
8-65	Eglinton Avenue West - Grade Separation and Reconstruction, Trethewey Drive to Weston Road; Construct Detour Road from Bicknell Avenue to Weston Road, Construct Overpass at C.P.R. and Bridge over Eglinton Avenue, both Welded Steel with Reinforced Concrete Sub-Structure and Deck; Reinforced Concrete Retaining Walls and Precast Post-Tensioned Concrete Retaining Walls; Approaches and Lighting for the C.N.R. and C.P.R. Railway Grade Separations and Road Reconstruc- tion, including Sewers; Watermains, Concrete Road Base, Stone Base, Curbs and Gutters, Catch Basins, Asphalt Paving, Concrete Sidewalks and Sodding. Kilmer Van Nostrand Co., Ltd. ** Laughlin, Wyllie and Ufnal .....	2,613,906
	J. L. Shirley J. Watson	
9-65	Finch Avenue - Reconstruction, from 1600 feet west of Bathurst Street to 500 feet west of Dufferin Street; Earth Work, Bridge and Culvert Construction, Steel Beam Guide Rail and Asphalt Paving. Raney, Brady, McCloy, Ltd. ....	509,410
	J. G. Flint	

# ... Contract not complete. Award figure.

10-65	Islington Avenue - Intersectional Improvements at Dixon Road; 600 feet north and 600 feet south of Dixon Road on Islington Avenue, and 600 feet east and 600 feet west of Islington Avenue on Dixon Road - Excavation, Grading, Granular Sub-Base, Concrete Base, Curbs and Gutters, Sidewalk, Traffic Islands, Asphalt Paving, Catch Basins, and Sodding. Johnson and Hogan Construction, Ltd. .... J. G. Flint	101,207
11-65	Jane Street - Reconstruction, Foxwell Street to Lambton Avenue; Excavation, Granular Sub-Base, Concrete Base, Curbs and Gutters, Sidewalk, Extension to Existing Concrete Arch Culvert, Asphalt Paving, Storm Sewer, Catch Basins and Sodding. Johnson and Hogan Construction, Ltd. .... J. G. Flint	500,608
12-65	Keele Street - Bloor Street West to Annette Street; Pavement Widening and Reconstruction - Excavation, Grading, Granular Sub-Base and Concrete Base, Curbs and Gutters. Sidewalk, Retaining Walls, Mortared Flagstone, Asphalt Paving, Storm Sewer, Catch Basins and Sodding. Johnson and Hogan Construction, Ltd. .... J. G. Flint	486,159
13-65	Tenders recalled, No. 24-65.	
14-65	Lawrence Avenue East - Reconstruction, Markham Road to Kingston Road; Excavation, Grading, Catch Basins, Curbs and Gutters, Granular Sub-Base, Concrete Base, Asphalt Paving, Storm and Sanitary Sewer, and Sodding. Dagmar Construction, Ltd. .... T. H. Johnston	608,177
15-65	Dupont Street - Davenport Road to Christie Street; Resurfacing, including Street Car Tracks, Curbs and Sidewalks. Warren Bituminous Paving Co., Ltd. .... D. A. Patterson	68,904
16-65	Oriole Parkway - Kilbarry Road to Oxtan Avenue; Resurfacing, Curbs and Sidewalks. John Cucci, Ltd. .... D. A. Patterson	23,309



17-65	Eglinton Avenue East - 1300 feet west to 2300 feet west of Don Mills Road; Detour Road. Miller Paving, Ltd. ....	25,149
	A. P. H. French	
18-65	Eglinton Avenue East - I.B.M. Interchange and Widening of Eglinton Avenue East between West Branch of Don River and Don Mills Road; Reinforced Concrete Structure, Grading, Drainage, Granular Base, Concrete Base, Steel Beam Guide Rail, Asphalt Pavement, Curb and Gutter, Aluminum Railing, Tubular Steel Piling and Electrical work. Swansea Construction Co., Ltd. ** M. M. Dillon, Ltd. ....	716,731
	A. P. H. French	
19-65	Don Valley Parkway - Painting of three Bridge Structures, over Bayview Avenue. C.N.R. Tracks and Don River. Lumb and Scotland, Ltd. ....	13,940
	D. R. Scammell	
20-65	The Queensway - Painting of three Bridge Structures, over Mimico Creek, Parkside Drive Overpass and South Kingsway Underpass. Lumb and Scotland, Ltd. ....	16,040
	D. R. Scammell	
21-65	Frederick G. Gardiner Expressway and Lake Shore Boulevard West - Painting of east-bound Bridge Structure over the Humber River. Harrison Muir, Ltd. ....	28,750
	D. R. Scammell	
22-65	Not awarded.	
23-65	Frederick G. Gardiner Expressway - Painting of east-bound and west-bound Overpasses at South Kingsway. Lumb and Scotland, Ltd. ....	7,740
	D. R. Scammell	
24-65	Bloor Street West - Bridge over Humber River; Repairs to Structural Steelwork, Deck Replacement, Waterproofing and Installation of Lighting Poles. Raney, Brady, McCloy, Ltd. ....	311,893
	J. M. Watson	

\$

25-65	Various Roads - Intersectional Improvements. K. J. Beamish Construction Co., Ltd. ....	111,088
	D. A. Patterson	
26-65	Spadina Expressway - Lawrence Avenue West to Wilson Heights Boulevard; Fabrication and Erection of Signs, Steel Sign Support Structures and Sign Illumination. Bennett and Wright Contractors, Ltd. ** M. M. Dillon, Ltd. ....	120,085
	J. L. Shirley	
27-65	Spadina Expressway - Wilson Avenue to Wilson Heights Boulevard, at Clanton Park Road; Excavation and Grading, Granular Base, Soil Cement Base, Concrete Base, Reinforced Concrete Paving, Asphalt Paving, Colored Pavement Surface Course, Curbs and Sidewalks, Storm and Sanitary Sewers, Watermains, Steel Beam Guide Rail, Steel Chain-Link Fence, Sodding, Reinforced Concrete Bridge Structures including Precast Concrete Beams, Aluminum Railing, Reinforced Concrete T.T.C. Station Structure, Reinforced Concrete Retaining Walls, Electrical Sub-Station Building, and Electrical Work. Swansea Construction Co., Ltd. ** M. M. Dillon, Ltd. ....	2,728,642
	J. L. Shirley	
28-65	Leslie Street - Detour Road at C.N.R. Tracks, south of Macdonald- Cartier Freeway. Miller Paving, Ltd. ....	75,443
	T. H. Johnston	
29-65	Don Mills Road - Storm Sewer, Sanitary Sewer and Watermains for Grade Separation at C.P.R. north of Eglinton Avenue East. George Wimpey Canada, Ltd. ** Damas and Smith, Ltd. ....	400,622
	T. H. Johnston	
30-65	Dundas Street West - Bloor Street West to Sorauren Avenue; Resurfacing and Widening - Concrete Base, Curbs and Gutter, Sidewalks, Storm Sewers, Catch Basins, and Asphalt Paving including the Street Car Track Allowance. MacDonald Paving, Ltd. ....	236,428
	D. A. Patterson	



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31-65	Markham Road - Kingston Road to Eglinton Avenue and Lawrence Avenue to Ellesmere Road; Excavation, Grading, Catch Basins, Curbs, Gutters, Sidewalks, Granular Sub-Base, Concrete Base, Asphalt Paving and Sodding. Cook Paving Co., Ltd. ....	502,272 T. H. Johnston
32-65	Kennedy Road at Sheppard Avenue and Warden Avenue at Sheppard Avenue - Intersectional Improvements; Excavation, Concrete Base, Curb and Gutter, Catch Basins, Asphalt Paving, Demolition of Buildings, Reinforced Concrete Bridge, Aluminum Handrail, Storm and Sanitary Sewer. Cook Paving Co., Ltd. ....	386,997 A. P. H. French
33-65	Bayview Avenue - Sheppard Avenue to Finch Avenue; Reconstruction - Excavation, Grading, Catch Basins, Curbs and Gutters, Granular Sub-Base, Concrete Base, Asphalt Paving, Storm Sewer and Watermain. Miller Paving, Ltd. ....	642,066 T. H. Johnston
34-65	Winter Salting and Snow Plowing - Various Roads - South-East Division. Miller Paving, Ltd. ....	148,459 M. R. Browning
35-65	Winter Salting and Snow Plowing - Various Roads - North-East Division. K. J. Beamish Construction Co., Ltd. ....	136,974 M. R. Browning
36-65	Winter Salting and Snow Plowing - Central and Expressway Division. Evans Contracting Co., Ltd. ....	138,543 M. R. Browning
37-65	Winter Salting and Snow Plowing - Various Roads - North-West Division. K. J. Beamish Construction Co., Ltd. ....	115,287 M. R. Browning
38-65	Winter Salting and Snow Plowing - Various Roads - South-West Division. W. A. Ryder Paving, Ltd. ....	99,826 M. R. Browning

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39-65	Eglinton Avenue East - Don Mills Road to Jonesville Crescent; Pavement Widening - Granular Sub-Base, Concrete Base, Curb and Gutter, Storm Sewers, Extension of Concrete Culvert, Catch Basins, Asphalt Paving and Concrete Median. John Cucci, Limited .....	465,711 A. P. H. French
40-65	Don Mills Road, north of Eglinton Avenue - Subway and Approaches; Construction of Continuous Reinforced Concrete Box Girder Structure under the C.P.R.; Excavation, Grading, Earthwork for Railroad Detour, Granular Sub-Base, Concrete Base, Curb and Gutter, Sidewalk, Asphalt Paving, Street Lighting, Sewer, Manholes, Catch Basins and Connections, Steel Beam Guide Rail, Sodding and Roadway Detour. Raney, Brady, McCloy, Ltd. ** Damas & Smith, Ltd. ....	865,577 T. H. Johnston
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1-66	Pottery Road - Earth Fill, approximately 210 feet of 36-inch C.I.P. and Fine Grading and Sodding of Slopes for Road Alignment to Broadview Avenue. Dineen Construction, Ltd. ....	62,033 J. M. Watson
2-66	Building for Maintenance Yard No. 3 - One-Storey Brick Building on east side of Bermondsey Road, south of Eglinton Avenue East. Ostvik Construction, Ltd. ** Margison & Keith .....	128,615 K. J. Gilbert
3-66	Bloor Street West - Painting of Structural Steelwork of Bridge over Humber River, and Refacing of Piers. C. H. Heist (Canada), Ltd. ....	134,772 D. R. Scammell
4-66	Spadina Expressway - Mt. Pleasant Road to Boulton Drive; South Trunk Storm Sewer - 450 feet Reinforced Concrete Sewer in Open Cut, 7000 feet of 12'6" Unreinforced Concrete Sewer in Tunnel, with Steel Primary Lining, Drop Shafts and Manholes. Robert McAlpine, Ltd. ** Fenco-Harris .....	4,467,207 # J. L. Shirley



5-66	Wilson Avenue - Relocation of Watermains east of Keele Street for Proposed Grade Separation at C.N.R.; 24-inch Cast-Iron Pipe, 6 and 12-inch Ductile Iron Pipe, 56-inch Tunnel Liner Plate, 24-inch Spiral- Welded Steel Casing Pipe, Meter and Valve Chambers, Water Services and Other Appurtenances. Sam Cosentino, Ltd. ** Duncan Hopper & Associates, Ltd. ....	120,863
	J. M. Watson	
6-66	Various Roads (Outside City) - Permanent Asphalt Repairs of Utility Road Cuts. Gazzola Paving, Ltd. ....	59,982
	E. D. Roberts	
7-66	Donlands Avenue - O'Connor Drive to Leaside Bridge; Pavement Reconstruction. Raponi Eastwood Paving & Construction, Ltd. ....	88,456
	E. D. Roberts	
8-66	Pape Avenue - 400 feet north of Gerrard Street to Danforth Avenue; Pavement Reconstruction - Partial Concrete Base, Brick Block Gutter, Removal of Street Car Rails and Asphalt Paving. Raponi Eastwood Paving & Construction, Ltd. ....	70,530
	E. D. Roberts	
9-66	Spadina Expressway - Don River to Mt. Pleasant Road; South Trunk Storm Sewer - 2230 feet Lined Open Channel, 270 feet of three 9'6" Cast-in-Place Reinforced Concrete Pipe in Open Cut, 1740 feet of three 9'6" Cast-in-Place Concrete Pipe in Tunnel, Reinforced Concrete Outfall Structure 225 feet in length, including five 6'0" Reinforced Concrete Precast Pipes to be jacked under C.N.R. tracks. Channelization and Gabion Lining of 500 feet of Don River, 800 feet Reinforced Concrete Box Culvert, 8'6" x 8'9", Manholes, Drop Chambers, Weirs, Overflow Weirs and Relocation and Regrading of Park Drive Reservation. S. McNally & Sons, Ltd. ** Fenco-Harris .....	3,664,433 #
	J. L. Shirley	
10-66	Bloor Street and Danforth Avenue - Sherbourne Street to Coxwell Avenue; Dense-Graded Asphalt Overlay of Street Car Track Allowance. Cook Paving Co., Ltd. ....	59,953
	E. D. Roberts	

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11-66	Bloor Street - Sherbourne Street to Dundas Street; Dense-Graded Asphalt Overlay of Street Car Track Allowance. Cook Paving Co., Ltd. .... E. D. Roberts	80,774
12-66	Various Locations (9) - Intersectional Improvements. Warren Bituminous Paving Co., Ltd. .... E. D. Roberts	88,202
13-66	Wilson Avenue - Pumping Station for drainage of Subway under C.N.R. tracks west of Dufferin Street, including supply and installation of Pumps and Pumping Equipment. Raney, Brady, McCloy, Limited. ** W. Sefton & Associates, Ltd. .... J. M. Watson	117,588 #
14-66	Bayview Avenue - 1200 feet south to 1800 feet north of Lawrence Avenue; Reinforced Concrete Median Barrier Wall. Johnson & Hogan Construction, Ltd. .... E. D. Roberts	17,156
15-66	Bayview Avenue - Finch Avenue to Steele's Avenue; Reconstruction and Widening - Excavation, Grading, Catch Basins, Curbs, Gutters, Sidewalk, Granular Sub-Base, Concrete Base, Asphalt Paving, Storm Sewer, and Culvert Extension with Gabion Wingwalls and Watermains. Leo Contracting Co., Ltd. .... D. A. Patterson	741,000 #
16-66	No award.	
17-66	Adelaide Street West - Bathurst Street to University Avenue; Reconstruction and Resurfacing outside Track Allowance, including Concrete Base where necessary, and Asphalt Overlay of Track Allowance, Curbs, Gutters and Side- walks. Godson Contracting Co., Ltd. .... E. D. Roberts	163,629
18-66	Don Mills Road - 1000 feet south of Overlea Boulevard to Eglinton Avenue, Barber Greene Road to Lawrence Avenue, and 1800 feet south to 1100 feet south of York Mills Road; Reconstruction - Excavation, Grading, Catch Basins, Concrete Curbs, Gutters and Sidewalks, Granular Sub-Base, Concrete Base, Asphalt Paving, Storm Sewer and Watermain. Dagmar Construction, Ltd. .... T. H. Johnston	783,366



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19-66	Markham Road - Ellesmere Road to Macdonald-Cartier Freeway; Reconstruction and Bridge - Excavation, Grading, Catch Basins, Curbs, Gutters, Granular Sub-Base, Concrete Base, Asphalt Paving, Storm and Sanitary Sewers and Reinforced Concrete Bridge with Aluminum Handrails. Raney, Brady, McCloy, Limited ..... D. R. Scammell	450,504
20-66	Dundas Street West - Bloor Street West to Dupont Street; Reconstruction and Widening - Curbs, Sidewalks, Catch Basins, Road Base, Gutter and Asphalt Paving. Godson Contracting Co., Ltd. .... E. D. Roberts	142,029
21-66	Kennedy Road - north of Sheppard Avenue; Reinforced Concrete Bridge over Highland Creek and Approaches - Aluminum Handrail, Waterproofing, Excavation, Grading, Curbs, Catch Basins, Relocation of Storm Sewer, Granular Sub-Base, Concrete Base, Guide Rail, Asphalt Paving and Detour Road. Raney, Brady, McCloy, Limited. ** Maksymec and Associates ..... J. M. Watson	165,120
22-66	Eastern Avenue - Leslie Street to Queen Street East; Reconstruction - Curbs, Sidewalks, Road Base and Catch Basins, Gutter, Storm Sewer, Asphalt Pavement and Sodding. Johnson & Hogan Construction, Ltd. .... E. D. Roberts	183,402
23-66	Queen Street East and Kingston Road - On Queen Street, Eastern Avenue to Kingston Road; on Kingston Road, Queen Street to Woodbine Avenue; Remove Granite Setts and, after Rail Adjustment by T.T.C., place Concrete Base and HL-8 Binder in Track Allowance. Adjust Catch Basins and Surface Entire Roadway with HL-1 Asphaltic Concrete. Kilmer Van Nostrand Co., Ltd. .... E. D. Roberts	61,029
24-66	Don Valley Parkway, at Beechwood Drive; Slope Stabilization, including Regrading, Granular Backfill and Sodding of Existing Slopes, Relocation of Section of Beechwood Drive, including Grading, Granular Base Course, Asphaltic Pavement and Curbs, Drainage Pipes and Appurtenances. Evans Contracting Co., Ltd. ** Fenco-Harris ..... D. A. Patterson	51,271

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25-66	Wilson Avenue - Dufferin Street to Keele Street; Reconstruction - Detour Road and Grading for Railway Diversion, Excavation including Bridge Approaches, Concrete Base, Curbs and Gutters, Storm and Sanitary Sewers, Watermains, Drainage Culverts, Catchbasins, Sidewalks, Asphalt Pavement, Elevated Sidewalks, Handrails, Approach and Bridge Lighting. Kilmer Van Nostrand Co., Ltd. ** Duncan Hopper & Associates, Ltd. .... J. M. Watson	1,099,300 #
26-66	Frederick G. Gardiner Expressway - Dufferin Street to Leslie Street; Reinforced Concrete Barrier Wall on Existing Median and Anti-Glare Panels. Dufferin Materials & Construction, Ltd. ** Lakeshore Expressway Consultants ..... T. H. Johnston	271,547
27-66	Don Valley Parkway - At E-N Ramp, Lawrence Avenue Interchange; Slope Stabilization, including Excavation, Granular Backfill, Grading and Sodding of Slope, Installation of Surface and Underground Drainage Pipes and Appurtenances. John Cucci, Ltd. ** Fenco-Harris ..... D. A. Patterson	80,804
28-66	Victoria Park Avenue - Sheppard Avenue - Reconstruction and Widening and Farmcrest Drive Diversion; On Sheppard Avenue 650 feet east and west of Victoria Park Avenue and Farmcrest Drive Diversion from Meadowacres Drive to Victoria Park Avenue opposite Consumers Road; Excavation, Storm and Sanitary Sewers. Concrete Road Base, Curb and Gutter, Sidewalk, Catch Basins, Manholes, Asphalt Paving and Sodding. Dagmar Construction, Ltd. .... D. R. Scammell	423,247
29-66	Permanent Asphalt Repairs of Utility Road Cuts - Bayview Avenue - Moore Avenue to Millwood Road and from Eglinton Avenue to 625 feet north; Kipling Avenue - Warnica Avenue to Munster Avenue. Dufferin Materials & Construction, Ltd. .... E. D. Roberts	99,357
30-66	Bayview Avenue - Chain-Link Fencing on east side from Gerrard Street to Bloor Ramp - Frost Steel & Wire Co., Ltd. .... E. D. Roberts	15,549



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31-66	Winter Salting and Snow Plowing - Various Roads - South-East Division. Miller Paving, Ltd. ....	176,945
	K. J. Gilbert	
32-66	Winter Salting and Snow Plowing - Various Roads - North-East Division. Miller Paving, Ltd. ....	176,066
	K. J. Gilbert	
33-66	Winter Salting and Snow Plowing - Central and Expressway Division. Evans Contracting Co., Ltd. ....	152,405
	K. J. Gilbert	
34-66	Winter Salting and Snow Plowing - Various Roads - North-West Division. K. J. Beamish Construction Co., Ltd. ....	225,339
	K. J. Gilbert	
35-66	Winter Salting and Snow Plowing - Various Roads - South-West Division. W. A. Ryder Paving, Ltd. ....	109,985
	K. J. Gilbert	
36-66	Leslie Street - Relocation, including Reinforced Concrete Structure with Prestressed Girders over Leslie Street, Reinforced Concrete Rigid Frame Structure over East Branch of the Don River, Reinforced Concrete Retaining Walls, Concrete-Filled Steel Tube Piles, Storm and Sanitary Sewers, Watermains, Telephone Duct Installation, Granular Base, Concrete Base, Curb and Gutter, Sidewalk, Asphalt Paving, Lighting, Sodding and Gabions. Cook Paving Co., Ltd. ** Ewbank, Pillar & Associates .....	1,493,528 #
	T. H. Johnston	
37-66	Don Valley Parkway - Median Guide Rail; Bloor Street Ramp to Lawrence Avenue; Galvanized Steel Beam Guard Rail and Asphaltic Concrete Paving on Median. Kilmer Van Nostrand Co., Ltd. ....	315,152
	D. R. Scammell	
38-66	Eglinton Avenue East - Detour Road at Wynford Drive. Miller Paving, Ltd. ....	59,154
	J. M. Watson	
39-66	Don Valley Parkway - Median Guide Rail; Lawrence Avenue to Macdonald-Cartier Freeway; Galvanized Steel Beam Guard Rail. Caten Construction, Ltd. ** Fenco-Harris .....	84,096 #
	D. A. Patterson	











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